RECOVERY KERNEL
PLAIN-ENGLISH TERM GUIDE

Expanded Edition — Added terms from Protocols 20–25 and Centurian Papers C-26 to C-31

Purpose: define the less-familiar or technical words in simple language so readers can keep moving without losing the thread.

I. THE BRAIN'S CHEMICAL MESSENGERS

Core neurotransmitters that drive mood, motivation, and stability.

Dopamine (The "Go Get It" Chemical): Drives motivation, pursuit, focus, movement, reward anticipation, and the feeling that effort is worth making. In recovery it helps rebuild ambition, interest, and the ability to care about ordinary life again.

Serotonin (The "Steady and Okay" Chemical): Supports mood stability, emotional balance, appetite, and sleep. A large portion is produced in the gut, which is why digestive health can affect mood.

GABA (The Brain's Brake Pedal): The primary calming signal that quiets overstimulation and reduces anxiety. Low GABA often feels like tension, panic, or an inability to settle.

Norepinephrine (Alertness & Readiness): Controls attention, readiness, and mental sharpness. Helpful in the right amount, but too much can feel like being wired, jumpy, or on edge.

Endorphins (Natural Painkillers): The body's own opioid-like chemicals. They reduce pain and can create a mild sense of relief or endurance, especially during exercise.

Anandamide (The "Bliss" Chemical): A natural cannabinoid made by the body that contributes to calm, stress relief, and the "runner's high."

II. NEUROPLASTICITY & SYSTEM REPAIR

How the brain heals, rewires, and adapts during recovery.

BDNF (Brain Fertilizer): Short for Brain-Derived Neurotrophic Factor. It helps the brain grow, repair, and form stronger new pathways.

Neuroplasticity: The brain's ability to change itself based on experience. Recovery uses this to weaken addiction patterns and strengthen healthier ones.

Reward System: The brain circuitry that decides what feels worth repeating. Addiction hijacks it by giving unnaturally strong reward signals.

Receptor Sensitivity: How strongly the brain notices a signal. During recovery this can be blunted, so normal rewards feel flat until the brain recalibrates.

Anhedonia: Temporary inability to feel pleasure from ordinary life. It often follows dopamine depletion but can improve as the system heals.

PAWS (Post-Acute Withdrawal Syndrome): The long, gray phase after the worst physical withdrawal is over. People may still have mood swings, low motivation, sleep issues, or brain fog while the nervous system keeps recalibrating.

III. THE GUT-BRAIN AXIS

The biological connection between digestive health and mental clarity.

Gut-Brain Axis: A two-way communication highway between the gut and brain that influences stress, mood, cravings, and cognition.

Microbiome: The ecosystem of bacteria and other microbes living in the gut. It affects inflammation, digestion, and neurotransmitter production.

Vagus Nerve: A major body-brain communication pathway that carries calming and safety signals. Supporting vagal tone can help the nervous system settle.

Enteric Nervous System: Often called the “second brain,” this is the independent nervous system built into the gut lining.

MMC (Migrating Motor Complex): The gut’s cleaning cycle that runs when you are not eating. It sweeps leftover material and bacteria through the small intestine between meals.

Borborygmi: The growling or rumbling stomach sounds many people hear during fasting. In this framework, that is often the MMC doing its housekeeping work.

IV. GENETICS & CELLULAR CHEMISTRY

The hardware terms found in the phenotype and precision-medicine docs.

Methylation: A basic cellular process used for detox, DNA repair, and making neurotransmitters like dopamine and serotonin.

MTHFR: An enzyme that helps activate folate into the form the body actually uses. Poor function can contribute to lower energy, mood issues, or neurotransmitter bottlenecks.

COMT: An enzyme that clears dopamine and stress chemicals. It helps determine whether someone feels under-stimulated and novelty-seeking or easily overstimulated and stress-sensitive.

Tyrosine: An amino acid used to build dopamine and norepinephrine.

Tryptophan: An amino acid used to build serotonin and melatonin.

Pharmacogenomics: Using a person’s genes to predict how they will respond to medications. It is basically matching the drug to the hardware.

Genotype: The actual genetic code someone carries.

Phenotype: How that genetic code shows up in real life: traits, tendencies, metabolism, reactions, or vulnerabilities.

CYP2C9: A drug-metabolizing enzyme important for many NSAIDs like ibuprofen and naproxen. Slow metabolism here can make ‘safe’ doses build up too high.

CYP2D6: A drug-metabolizing enzyme that activates or clears many medications, including codeine and some psychiatric drugs. Too little or too much activity can both cause problems.

Poor Metabolizer: A person whose body clears or activates a drug much more slowly than expected. Standard doses may build up, hit too hard, or fail in unusual ways.

Intermediate Metabolizer: A person whose drug-processing speed is somewhat reduced. They may still tolerate medicines, but standard dosing can be less predictable.

Ultra-Rapid Metabolizer: A person whose body processes certain drugs unusually fast. Some medications wear off too quickly, while some prodrugs can convert too fast and become dangerous.

Tachyphylaxis: When a medication seems to stop working because the body has adapted to it. In plain terms: the same dose stops producing the same effect.

D2 Receptor: A subtype of dopamine receptor involved in motivation, reward, movement, and psychosis-related pathways. Blocking it can reduce psychosis, but can also flatten drive and pleasure.

D2 Antagonist: A medication that blocks dopamine D2 receptors. This can be useful in acute psychiatric crises, but may also suppress motivation, pleasure, and sexual function.

V. STRESS, HORMONES & RECOVERY BIOLOGY

Terms related to the body's electrical, hormonal, and recovery systems.

Cortisol: The main stress hormone. It helps in emergencies, but chronically high cortisol worsens anxiety, cravings, sleep, inflammation, and memory.

Glutamate: The brain's main excitatory signal. Too much without enough GABA can feel like mental noise, agitation, or a 'glutamate storm.'

Electrolytes: Minerals such as magnesium, potassium, and calcium that run the body's electrical systems.

Magnesium: A key mineral for sleep, muscle relaxation, and nervous system calming.

Prolactin: A hormone that rises when dopamine is pushed down. When too high, it can suppress sex hormones and reduce libido, orgasm, and sexual function.

Hyperprolactinemia: Abnormally high prolactin levels. In this context it often means medication-driven hormone suppression.

GnRH: A brain signal hormone that starts the chain for making sex hormones. If it is suppressed, testosterone and estrogen can fall.

LH / FSH: Pituitary hormones that tell the ovaries or testes to make sex hormones. Lowering them can reduce fertility, libido, and reproductive function.

Aromatase: An enzyme that converts testosterone into estrogen. In this book it matters because higher body fat can increase that conversion.

PSSD (Post-SSRI Sexual Dysfunction): Persistent sexual side effects that continue after stopping an SSRI. Symptoms can include numbness, low desire, or trouble reaching orgasm.

Genital Anesthesia: A patient term for sexual numbness or reduced sensation, often discussed in SSRI-related side effects.

Anorgasmia: Difficulty or inability to reach orgasm.

Amenorrhea: When menstrual periods stop.

Gynecomastia: Breast tissue enlargement in males, often linked to hormone imbalance or high prolactin.

HPA Axis: The stress-response system linking the brain, pituitary gland, and adrenal glands. When it is stuck 'on,' the person feels chronically keyed up or drained.

Autophagy: The body's cellular cleanup and recycling mode. It increases during fasting and helps remove damaged cellular material.

Ketosis: A fuel-burning state where the body relies more on fat and ketones than on incoming carbohydrates.

Glycogen: Stored carbohydrate kept mainly in liver and muscle. It holds a lot of water, which is why glycogen loss can make a person look deflated quickly.

Osmolality: How concentrated the blood is. When it rises, the body reads that as dehydration and triggers thirst hormones.

ADH (Antidiuretic Hormone): A hormone that helps the kidneys hold onto water when the body is dehydrated.

Desiccation: Drying out at the cellular level. In plain English: tissues losing the water they need to work properly.

VI. ADVANCED OPTIMIZATION & SUPPLEMENT TERMS

Less familiar terms introduced in the hardware-upgrade material.

NAD+ (Nicotinamide Adenine Dinucleotide): A molecule every cell uses to make energy, repair damage, and support healthy brain function. The book treats it as part of the body's cellular battery system.

Bioavailable: How much of something actually gets into the body and can be used. A highly bioavailable form reaches the system more directly.

NMN: A supplement the body can convert into NAD+. Think of it as raw material for rebuilding cellular energy support.

NR (Nicotinamide Riboside): Another NAD+ precursor used to help the body replenish cellular energy pathways.

Sirtuins: Repair-and-maintenance proteins that use NAD+ to do their work. In simple terms: part of the cell's longevity and cleanup crew.

Peptides: Short chains of amino acids used as signaling molecules. They act less like vitamins and more like tiny biological instructions.

BPC-157: A peptide discussed for tissue and gut healing. In plain language: a repair-signal peptide people use to support recovery of irritated or damaged tissue.

Semax: A neuroactive peptide used in some countries for focus, brain support, and neuroprotection.

Selank: A calming peptide discussed for anxiety and mental steadiness without the classic sedation of stronger anti-anxiety drugs.

Dihexa: An experimental cognitive peptide discussed as a possible neuroplasticity or memory enhancer.

PT-141: A peptide sometimes used to support sexual desire and arousal through brain pathways rather than just blood flow.

Thymosin Alpha-1: An immune-support peptide used in some clinical contexts to regulate immune function.

CJC-1295: A peptide used to stimulate growth-hormone signaling over time.

Ipamorelin: A peptide often paired with CJC-1295 to encourage growth-hormone release in a gentler, targeted way.

Neurofeedback: A training method where a person gets real-time feedback on brain activity and practices shifting it toward a steadier pattern.

Lion's Mane: A mushroom supplement discussed for supporting nerve growth factors and brain repair.

Phosphatidylserine: A fat-like molecule that helps cell membranes, especially brain cells, work properly.

Alpha-GPC: A choline source that helps the body make acetylcholine, a chemical important for focus, learning, and memory.

Uridine: A cellular building block discussed for membrane health and dopamine-receptor support.

CDP-Choline (Citicoline): A choline compound that supports membrane repair and acetylcholine production.

PQQ: A compound discussed for supporting mitochondria, the energy-producing parts of cells.

Sulforaphane: A compound found in broccoli sprouts and similar foods that activates cellular detox and antioxidant defenses.

VII. BEHAVIORAL, RELATIONAL & KERNEL FRAMEWORK TERMS

Framework words that appear in the newer Centurian papers.

Uptime: A systems word for how functional and stable a person's overall recovery state is at a given time.

Uptime Assessment: A quick check of how degraded or stable the system is, rather than treating recovery as all-or-nothing.

Mirror Neurons: Brain cells that simulate what we watch other people do. In recovery, this is used to explain why being around use can activate cravings.

Character Autopsy: A structured review of the old addicted self: what it did, what it protected, and what damage it caused.

Actor vs. Character: A recurring distinction in the Centurian papers: the addicted identity is the role, not the whole person.

Recast: Redirecting the same intensity and obsessive drive into something real rather than into a destructive simulation.

Coverage: A metaphor for recovery protection built by daily maintenance. If you stop paying the 'premiums,' the system gets exposed.

Premiums: The basic daily inputs that keep recovery stable: sleep, food, movement, support, regulation, and honest check-ins.

Collective Tab: The accumulated cost other people or systems absorbed during the addiction phase.

Sovereignty: Handling one's life, cost, responsibility, and choices without quietly billing others for the consequences.

Tare: The true baseline or empty-container weight of a system. In the book it means the real capacity and starting point that must be respected.

Tare Violation: Pushing a system past its healthy limit until the container itself starts deforming.

Counterfeit Sacred: A chemical shortcut that mimics a spiritual or emotional breakthrough without the real groundwork needed to sustain it.

Intimate System Interference: When a partner's use or instability directly threatens your own recovery environment.

Environmental Contamination: Triggers introduced into the home or close personal environment: paraphernalia, smell, use residue, behavioral cues.

Isolation Trap: The self-protective but dangerous tendency to manage a major destabilizer alone and in secret.

Social Spec: A deliberate plan for re-entering social life in stages instead of relying on substances or panic-driven improvisation.

Sovereign Dating Mindset: Dating from self-respect and selection rather than from shame, desperation, or the hope of rescue.

Apropos Therapy: Using a full fictional consequence arc—such as a TV series about addiction—as a mirror for recognition and integration rather than as a trigger.

VIII. SPIRITUAL / CULTURAL TERMS MADE PLAIN

Less familiar tradition-based terms translated into plain language.

Kundalini: A spiritual term for life-force energy rising through the body's central channel. In the book it is used to describe deep, genuine opening versus chemical imitation.

Muladhara (Root Center): The 'root' center associated with safety, survival, grounding, and physical security.

Svadhisthana (Sacral Center): The center associated with sexuality, pleasure, creativity, and generative life force.

Manipura (Solar Plexus Center): The center associated with will, agency, personal power, and directed action.

Anahata (Heart Center): The center associated with love, empathy, and connection.

Ajna (Third Eye): The center associated with insight, pattern-recognition, and inner perception.

Acedia: An older spiritual word usually translated as sloth, but here it means refusal of the maintenance work life actually requires.

Agape: Self-giving, unconditional love; a spiritual word used to describe a high form of openhearted connection.

Nafs: An Islamic term often referring to the ego-self or lower appetites that can distort judgment if left untrained.

Qliphoth: A Kabbalistic term for distorted or hollow shells of spiritual force; in plain English, corrupted versions of something sacred.

Tapas: A Sanskrit term for disciplined effort, heat, or practice that gradually transforms the person. In the book it means taking the stairs instead of the shortcut.

Sangha: A Buddhist term for a practice community—the people who help hold the path with you.

Fana: A Sufi term for dissolution of the small ego-self into something larger than itself.

Ritual Container: The structured setting that makes powerful emotional, spiritual, or therapeutic work safe enough to hold and integrate.

QUICK REFERENCE SUMMARY

Term	Plain-English Function
Dopamine	Drive, movement, pursuit, and reward anticipation
Serotonin	Mood steadiness, emotional balance, and sleep support
GABA	The off-switch for overstimulation and anxiety
BDNF	Brain fertilizer for rewiring and repair
Vagus Nerve	Body-brain calming highway
MMC	The gut's cleaning cycle between meals
NAD+	Cellular energy and repair support molecule
Pharmacogenomics	Matching medication choice to genetic hardware
CYP2C9	A gene that affects NSAID clearance
Hyperprolactinemia	Too much prolactin; often means hormone suppression
PSSD	Sexual side effects that persist after stopping an SSRI

Tare	The true baseline and capacity of a system
Counterfeit Sacred	A shortcut that imitates a real breakthrough without real groundwork
Kundalini	Life-force awakening; genuine opening versus chemical simulation
Uptime	Current level of recovery stability and function